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Customer No.: 23696
Attorney Docket No.: 990347
In Re Application of: Christopher Patrick
Serial Number: 09/741,631
Filed: 12/18/00
Examiner: Shuwang Liu
Group Art Unit: 2634

Dear Sir:

Transmitted herewith for filing is an APPELLANT'S APPEAL BRIEF in the above identified application.

CLAIMS	(a) Number Remaining After Amendment	(b) Highest Number Previously Paid For	(c) Extra Claims	Large Entity Fee	Fee Paid
Total*	20	25	0	x $18 =	$0
Independent**	5	5	0	x $88 =	$0
Multiple Dependent Claim(s): ☐ Yes ☒ No				$300	$
EXTENSION FEES			☐ One Month	$110	$
			☒ Two Months	$450	$450.00
			☐ Three Months	$980	$
TERMINAL DISCLAIMER				$110	$
				TOTAL FEE	$450.00

*If the number in column a is less than 20, enter 0 in column c.
**If the number in column a is less than 3, enter 0 in column c.

4. ☐ Fee check in the amount of $_____ is enclosed to pay for any claim and/or extension fees.
5. ☒ Please charge Deposit Account No. 17-0026 of QUALCOMM Incorporated the amount of $450.00. The Commissioner is hereby authorized to charge payment of any additional fees which may be required, or credit any overpayment to said Deposit Account No. 17-0026. A duplicate of this sheet is enclosed for fee processing.
6. ☒ The Commissioner is further hereby authorized to charge to said Deposit Account No. 17-0026, pursuant to 37 CFR 1.25(b), any fee whatsoever which may become properly due or payable, as set forth in 37 CFR 1.16 to 37 CFR 1.18 inclusive, for the entire pendency of this application without specific additional authorization.

Date: July 25, 2005

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of:

Christopher Patrick

Application No.: 09/741,631

Filed: December 18, 2000

For: METHOD AND APPARATUS FOR REDUCING CODE PHASE SEARCH SPACE

Docket No. : 990347
Customer No. : 023696

Confirmation No.: 5613

Examiner: Shuwang Liu

Art Unit: 2634

APPELLANT BRIEF
UNDER 37 C.F.R. § 41.37

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Appellant offers this Brief further to the Notice of Appeal mailed on May 23, 2005.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner of Patents and Trademarks, Alexandria, VA 22313, on:

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1. Real Parties In Interest

QUALCOMM Incorporated is the real party in interest as the assignee of the above-identified application.

2. Related Appeals And Interferences

No other appeals or interferences are known that will directly affect, are directly affected by, or have a bearing on the Board decision in this appeal.

3. Status Of Claims

Claims 1, 3-8, 10-15, 17-21, 23 and 24 are currently pending in the application. Claims 2, 9, 16, 22, and 25 were canceled in the response dated November 10, 2003. All pending claims stand finally rejected pursuant to a final Office Action mailed February 4, 2005. The rejections of the claims are believed to be improper and are the subject of this appeal.

4. Status Of Amendments

No amendments have been entered subsequent to the final Office Action mailed February 4, 2005.

5. Summary Of Claimed Subject Matter

In the following summary, Appellants have provided exemplary references to sections of the specification and drawings supporting the subject matter defined in the claims as required by 37 C.F.R. § 41.37. The specification and drawings also include additional support for other exemplary embodiments encompassed by the claimed subject matter. Thus, it should be appreciated that the references are intended to be illustrative in nature only.

Position location using Global Positioning System (GPS) satellite signals requires that a receiver acquire multiple satellite signals. Each GPS satellite signal includes a direct sequence spread spectrum signal that is spread using a Coarse Acquisition (CA) code. The CA code has a chip rate of 1.023 MHz and repeats every 1023 symbols. A GPS receiver needs to determine the code phase of a received GPS satellite signal by searching for a correlation between the receiver output and a code sequence based on a particular CA code. Because the

search space is relatively large (1023 symbols), the time needed to acquire multiple GPS satellite signals may be unacceptable. In order to reduce acquisition delay, information reducing the code phase search space can be transmitted to the receiver.

Methods and apparatus for generating GPS code phase search space information and receiving GPS code phase search space information are disclosed. The embodiment of claim 1 discloses a method comprising determining a code phase of each among a plurality of received signals, wherein said received signals are GPS signals. See, e.g., Application, Figures 6 and 7, and page 7, ll. 1-17. See also, id. at Figure 10 and page 7, ll. 22-25. The method also comprises transmitting a time difference between the code phases of at least one pair among the plurality of received signals. See id., Figure 7 transmitter 230 and Figure 9 task P145, and page 7, ll. 18-25.

The embodiment of claim 8 discloses a method comprising determining a code phase of a first received signal. Id., Figure 12 correlator 320, and page 8, ll. 12-13. The method also includes determining a code phase of a second received signal. Id., at page 8 line 13-15. See also, id. at page 7, ll.7-10. The first and second received signals can be GPS signals. Id., Figures 13 and 14 GPS antenna 340, and page 8 ll. 16-18. Determining a code phase of the second received signal is based at least in part on a time difference between the code phase of the first received signal and the code phase of the second received signal. Id., at page 6, ll. 18-22 and page 8, ll. 13-15.

The embodiment of claim 15 discloses an apparatus that comprises a GPS receiver 210 configured to receive a plurality of signals. Id., Figures 7 and 11, and page 7, ll. 27-28. The apparatus includes a correlator 220 configured to determine a code phase for each among the plurality of received signals. Id. at page 7 ll. 15-17. The apparatus also includes a transmitter 230 configured to transmit a time difference between the code phases of at least one pair among the plurality of received signals. Id., Figures 7-9, and page 7, ll. 18-21.

The embodiment of claim 21 discloses an apparatus that comprises a GPS receiver 310 configured to receive a first and second signal and to receive a signal comprising a time difference between the code phase of the first received signal and the code phase of the second received signal. Id., Figures 12-13, and page 8, ll. 9-11 and 16-19. The apparatus also includes a correlator 320configured to determine a code phase of at least one of the first and second received signals with respect to a predetermined code and to correlate the other of the

first and second received signals to the predetermined code based upon the time relationship between the first and second received signals. Id., at page 8 ll. 14-17.

The embodiment of claim 24 discloses a system that comprises a reference receiver 120 configured to receive GPS signals from a plurality of space vehicles and to transmit information. Id., Figures 6-7, and page 7, ll. 3-4. The system also includes a field receiver 110 configured to receive signals from a plurality of space vehicles and to receive the information. Id., Figures 6 and 12-14, and page 8, ll. 16-19. The reference receiver 120 determines a reference code phase for each among at least a first one and a second one of the signals, and the information pertains at least to a time difference between the reference code phases for the first one and the second one of the signals. Id., at page 7, ll. 3-7. The field receiver 110 determines a field code phase for the first one of the signals, and the field receiver 110 determines a field code phase for the second one of the signals at least in part from the information. Id., at page 7, ll. 7-10 and page 8, ll. 7-15.

6. Grounds Of Rejection Presented For Review

Claims 1, 3-8, 10-15, 17-21, 23 and 24 are pending in the application and were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,752, 218 to Harrison et al. (hereinafter Harrison).

7. Argument

A. Whether Harrison anticipates claims 1, 3-8, 10-15, 17-21, 23 and 24.

Claims 1, 3-8, 10-15, 17-21, 23 and 24 were rejected under 35 U.S.C. § 102(b) as being anticipated by Harrison.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "Anticipation under 35 U.S.C. § 102 requires the disclosure in a single piece of prior art of each and every limitation of a claimed invention." Electro Med. Sys. S.A. v. Cooper Life Sciences, 34 F.3d 1048, 1052, 32 USPQ2d 1017, 1019 (Fed Cir. 1994).

Applicant respectfully contends that Harrison fails to describe each and every element of the claims.

1. Harrison fails to describe each and every element of claims 1, 3-7, 15, and 17-20.

Claim 1 recites a method that includes determining code phases for each of a plurality of received GPS signals, and "transmitting a time difference between the code phases of at least one pair among the plurality of received signals." Application, Claim 1. The Examiner contends that Harrison describes every element of claim 1. Contrary to the Examiner's assertion, Harrison fails to describe transmitting a time difference between the code phases of at least one pair among the plurality of received signals.

The Examiner initially contends that transmitting the time difference between code phases is described in Harrison, unspecifically citing Harrison Col. 8, line 65-Col. 10, line 34. Office Action, dated July 13, 2004, at page 2, last three lines on page.

The Examiner, in the subsequent final Office Action, dated February 4, 2005, argues that Harrison describes "the object's location is accurately determined from propagation time differences between at least five satellite signals received at the traced object. The propagation time difference between signals from satellite i and j is defined as $\Delta_{ij}=\tau_j- \tau_i$, where τ_i is the signal propagation time from satellite i to the railcar." Final Office Action, dated February 4, 2005, at page 2, citing Harrison, Col. 7, ll. 21-25. The Examiner then cites Harrison: "The measured propagation time difference values are transmitted to a central station where the location of the object to be tracked is calculated based upon the propagation time differences of the signals transmitted from the satellite." Id. at page 2-3, citing Harrison, Abstract. Thus, Harrison is concerned with communicating propagation time differences to a central station to allow the central station to compute the location of the railcar.

However, Applicant's claim 1 does not recite a method that comprises transmitting *propagation time differences*. Instead, Applicant claims "transmitting a *time difference between the code phases*." Therefore, the portion of Harrison cited by the Examiner fails to describe transmitting a time difference between code phases.

The Examiner also states that in the embodiments described in Harrison, "the propagation time differences Δ_{ij} are not directly measured at the railcar receiver. Instead, only the code or bit phases associated with reception time t_R are measured, and these data, or their

differences including the satellite identifications, are transmitted to the central station." Id. at page 3, citing Harrison, Col. 8, ll. 24-29. The Examiner notes two different methods described in Harrison, but fails to provide any context or argument relating what is described in the methods to Applicant's claims. Id., at page 3.

A reading of the Harrison reference reveals that the timing diagram of Figure 4 is described, in part, at Col. 8, line 45 through Col. 9, line13. Harrison equation (7) provides a generalized equation for the reception time. From Harrison equation (7),

$$t_R = t_i^s + T^C(m_i + \mu_i) + \tau_i$$

where t_i^s is the time when the start of a currently received frame was transmitted, m_i is the integer number of code periods between time t_R and the beginning of the received data frame, and μ_i is the receiver code word phase at time t_R. See Harrison, Col. 8, ll. 45-53. The term τ_i represents the propagation delay from the i^{th} satellite to the receiver. Id., at Col. 7, ll. 24-25. The term T^C represents the code period. Id. at Col. 7, ll. 1-3.

Therefore, equation (7) provides that the term μ_i is a dimensionless fraction that characterizes a partial offset of a code word. That is, the term μ_i represents the fraction of the entire code period that the reception time is offset from a code word boundary.

It is clear that the term μ_i does not represent a time. From equation (7) the term μ_i must be multiplied by a term having dimensions of time (T^C) in order to provide a measure of time that is a component of the reception time determined by equation (7).

The propagation time differences Δ_{ij} are given by equation (10) of Harrison. Harrison notes that the values of the partial code word offsets, μ_i for the various satellite signals received at the railcar can be communicated to the central station. Id., at Col. 9, ll. 6-11. Harrison further describes two methods in which the dimensionless offset values, μ_i, for the various satellite signals are communicated from the railcar to the central station. See, id., Col. 10, ll. 42-44 and Col. 13, ll. 37-40.

Because at best, Harrison describes transmitting a dimensionless offset value to the central station, Harrison fails to describe Applicant's claimed element of "transmitting a time difference between the code phases of at least one pair among the plurality of received signals." Therefore, Applicant believes that claim 1 is allowable over Harrison and respectfully requests reversal of the rejection and allowance of the claim.

Applicant previously identified the values m_i as the code phase times and the quantity (m_i- m_j) as the time difference or offset between code phases of satellites i and j. However, upon further review of Harrison, the term m_i is the integer number of code periods between time t_R and the beginning of the received data frame. Id., at Col. 8, ll. 51-53. Thus, the difference (m_i- m_j) represents the integer number of code periods between the propagation times of signals from satellites i and j.

Moreover, the difference (m_i- m_j) is not determined at the railcar, but instead, is *determined at the central station*. See, id., Col. 10, ll. 54-56 and Col. 13, ll. 60-65. Thus, the railcar does not transmit this difference value to the central station. Further, there is nothing to indicate that this difference value is transmitted by the central station.

The Examiner urges the Applicant to "read column 10, lines 15-56 of the reference and appendix A to understand how to determine (m_i- m_j)." Final Office Action, dated February 4, 2005, at page 3. However, it is clear from reading Harrison that the difference term (m_i- m_j) is determined at the central station, and that neither the railcar nor the central station transmits this value. Therefore, any discussion of this difference term bears no relation to Applicant's claimed element of "transmitting a time difference between the code phases of at least one pair among the plurality of received signals."

Claim 15 includes a claim element similar to that discussed above in relation to claim 1. Claim 15 recites an apparatus that comprises "a transmitter configured to transmit a time difference between the code phases of at least one pair among the plurality of received signals." Therefore, Applicant believes claim 15 to be allowable for the same reasons as presented above in relation to claim 1, and requests reversal of the rejection and allowance of claim 15.

Claims 3-7 depend from claim 1 and claims 17-20 depend from claim 15. Claims 3-7 and 17-20 are believed to be allowable at least for the reason that they depend from an allowable base claim. Applicant respectfully requests reversal of the rejections to claims 3-7 and 17-20 and allowance of claims 3-7 and 17-20.

2. Harrison fails to describe each and every element of claims 8, and 10-14.

Claim 8 recites a method that comprises "determining a code phase of a second received signal,... wherein the determining a code phase of the second received signal is based at

least in part on a time difference between the code phase of the first received signal and the code phase of the second received signal." Application, claim 8.

The Examiner fails to identify any description in Harrison corresponding to this claimed element. In Harrison, GPS receivers are described at the railcar and the central station. See, e.g., Harrison, Figure 1 and Col. 6, ll. 33-41 and Col. 10, ll. 49-52. Harrison fails to describe how any of the GPS receivers determine "a code phase of the second received signal is based at least in part on a time difference between the code phase of the first received signal and the code phase of the second received signal."

The portion of Harrison cited to by the Examiner in the Final Office Action (column 6, line 47-column 8, line 58) fails to describe determining a code phase of a second signal based on a time difference between the code phase of the first received signal and the code phase of the second received signal. Indeed, the portion cited to be the Examiner expressly requires the railcar independently determine the code phases from individual satellites. The railcar has no information regarding a time difference between code phases, and as such, is unable to use such information in determining a code phase of a second received signal.

Harrison fails to describe Applicant's claimed element of "determining a code phase of a second received signal,... wherein the determining a code phase of the second received signal is based at least in part on a time difference between the code phase of the first received signal and the code phase of the second received signal," and the Examiner does not identify any reference providing a description of the claimed element. Therefore, Applicant believes that claim 8 is allowable over Harrison and respectfully requests reversal of the rejection and allowance of the claim.

Claims 10-14 depend from claim 8 and are believed to be allowable at least for the reasons that they depend from an allowable base claim. Applicant respectfully requests reversal of the rejections of claim 10-14 and requests allowance of claims 10-14.

3. Harrison fails to describe each and every element of claims 21 and 23.

Claim 21 recites an apparatus that comprises "a GPS receiver configured to receive a first and second signal and to receive a signal comprising a time difference between the code phase of the first received signal and the code phase of the second received signal." Application, claim 21. The apparatus also comprises "a correlator configured to determine a

code phase of at least one of the first and second received signals with respect to a predetermined code and to correlate the other of the first and second received signals to the predetermined code based upon the time relationship between the first and second received signals." Id.

Harrison fails to describe the claimed features. Furthermore, the Examiner fails to identify any description from Harrison that corresponds to the claimed features.

The claimed GPS receiver is configured "to receive a signal comprising a time difference between the code phase of the first received signal and the code phase of the second received signal." Harrison provides no description of such a receiver. The Examiner contends that this is described at Harrison, Figure 1. Final Office Action, dated February 4, 2005, at page 4. It is not clear if the Examiner is identifying the receiver within the railcar or the receiver within the central station. However, neither receiver has the claimed capability.

The receiver within the railcar clearly does not "receive a signal comprising a time difference between the code phase of the first received signal and the code phase of the second received signal." The Examiner contends, in the rejection of claim 1, that the railcar generates this signal. However, as noted above in the discussion of claim 1, the railcar does not, in fact, generate the claimed signal.

Even if the railcar did generate the exact claimed signal, it is clear that no receiver in the central station uses such a signal to "determine a code phase of at least one of the first and second received signals with respect to a predetermined code and to correlate the other of the first and second received signals to the predetermined code based upon the time relationship between the first and second received signals." As discussed above in relation to the rejection of claim 8, the central station may include a GPS receiver, but Harrison fails to describe or even suggest that the GPS receiver in the central station includes "a correlator configured to determine a code phase of at least one of the first and second received signals with respect to a predetermined code and to correlate the other of the first and second received signals to the predetermined code based upon the time relationship between the first and second received signals." Instead, Harrison describes the GPS receiver in the central station as "a standard GPS receiver." Harrison, Col. 10, ll. 49.

Therefore, Harrison fails to describe each element of claim 21. Applicant respectfully request reversal of the rejection of claim 21 and allowance of the claim. Claim 23 depends from claim 21 and is believed to be allowable at least for the reason that claim 23

depends from an allowable base claim. Applicant respectfully requests reversal of the rejection to claim 23 and allowance of the claim.

4. Harrison fails to describe each and every element of claim 24.

Claim 24 recites a system comprising a reference receiver and a field receiver. The reference receiver is "configured to receive GPS signals from a plurality of space vehicles and to transmit information." Application, claim 24. The information "pertains at least to a time difference between the reference code phases for...at least a first one and a second one of the signals" received by the field receiver. Id.

The field receiver receives the information. "[T]he field receiver determines a field code phase for the first one of the signals." Id. The field receiver also "determines a field code phase for the second one of the signals at least in part from the information."

The Examiner contends that the receiver 16 in the central station of Harrison corresponds to the reference receiver. Final Office Action, dated February 4, 2005, at page 6. However, it is clear that the central receiver in Harrison does not transmit any information. Indeed, the block diagram (Figure 1B) of the central station 16 fails to even identify a transmitter. See, Harrison, Figure 1B.

The Examiner contends that the railcar of Harrison corresponds to the claimed field receiver. Final Office Action, dated February 4, 2005, at page 6. The Examiner also contends that Harrison describes how the field receiver "determines a field code phase for the second one of the signals at least in part from the information." The Examiner cites to column 8 line 65-column 10, line 34 of Harrison. Id. However, this is the same portion of Harrison that the Examiner cites to when alleging that a receiver determines and transmits a time difference between code phases. Id. at page 4, rejection of claims 1 and 8.

The Examiner provides contradictory citations. The Examiner alleges that the railcar determines the code phase time difference that is transmitted to the central station in the rejection of claim 1. The Examiner then cites to the same portion of Harrison in arguing that the railcar receives the information pertaining to a time difference between code phases in the rejection of claim 24.

However, it is clear that Harrison fails to describe the central station transmitting any information. Thus, Harrison also fails to describe the railcar receiving information transmitted by the central station.

Harrison fails to describe several of the elements from claim 24. Therefore, Applicant respectfully requests reversal of the rejection of claim 24 and allowance of the claim.

B. Conclusion

The Harrison reference fails to describe each and every limitation of a claimed invention. Harrison does not anticipate any of Applicant's claims because Harrison fails to describe at least one element from each of the claims.

Applicant respectfully requests reversal of the rejections of claims 1, 3-8, 10-15, 17-21, 23 and 24. Applicant respectfully contends that the claims are in condition for allowance.

Respectfully submitted,

Date: July 25, 2005

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60540646 v1

CLAIMS APPENDIX

The claims pending in the application are as follows.

1. (Previously Presented) A method comprising:

determining a code phase of each among a plurality of received signals, wherein said received signals are GPS signals; and

transmitting a time difference between the code phases of at least one pair among the plurality of received signals.

2. (Canceled)

3. (Original) The method according to claim 1, wherein each among the plurality of received signals has a. corresponding periodic code, and

wherein each among the code phases relates to a predetermined position within the corresponding periodic code.

4. (Original) The method according to claim 1, wherein each among the plurality of received signals is based at least in part on a corresponding direct-sequence spread spectrum modulated signal.

5. (Original) The method according to claim 1, wherein each among the plurality of received signals is based at least in part on a corresponding direct-sequence pseudonoise modulated signal.

6. (Original) The method according to claim 1, the method further comprising receiving a composite signal,

wherein each among the plurality of received signals is based at least in part on at least a portion of the composite signal.

7. (Original) The method according to claim 6,

wherein the determining a code phase of each among a plurality of received signals comprises calculating a correlation, for each among the plurality of received signals, between a corresponding code sequence and a signal based at least in part on the composite signal,

wherein each among the plurality of received signals has a corresponding periodic code, and

wherein each among the code phases relates to a corresponding predetermined position within the corresponding periodic code, and

wherein the code sequence relates at least in part to the corresponding periodic code.

8. (Previously Presented) A method comprising:

determining a code phase of a first received signal; and

determining a code phase of a second received signal,

wherein said first and second received signals are GPS signals, and

wherein the determining a code phase of the second received signal is based at least in part on a time difference between the code phase of the first received signal and the code phase of the second received signal.

9. (Canceled)

10. (Original) The method according to claim 8, wherein the first received signal has a corresponding periodic code and the second received signal has a corresponding periodic code, and

wherein each among the code phase of the first received signal and the code phase of the second received signal relates to a corresponding predetermined position within the corresponding periodic code.

11. (Original) The method according to claim 8, wherein each among the first received signal and the second received signal is based at least in part on a corresponding direct-sequence spread spectrum modulated signal.

12. (Original) The method according to claim 8, wherein each among the first received signal and the second received signal is based at least in part on a corresponding direct-sequence pseudonoise modulated signal.

13. (Original) The method according to claim 8, the method further comprising receiving a composite signal, wherein each among the first received signal and the second received signal is based at least in part on at least a portion of the composite signal.

14. (Original) The method according to claim 13,

wherein the determining a code phase of a first received signal comprises calculating a correlation between a code sequence and a signal based at least in part on the composite signal,

wherein the first received signal has a corresponding periodic code and the second received signal has a corresponding periodic code, and

wherein each among the code phase of the first received signal and the code phase of the second received signal relates to a corresponding predetermined position within the corresponding periodic code, and

wherein the code sequence relates at least in part to the periodic code corresponding to the first received signal.

15. (Previously Presented) An apparatus comprising:

a GPS receiver configured to receive a plurality of signals;

a correlator configured to determine a code phase for each among the plurality of received signals; and

a transmitter configured to transmit a time difference between the code phases of at least one pair among the plurality of received signals.

16. (Canceled)

17. (Original) The apparatus according to claim 15, wherein each among the plurality of received signals has a corresponding periodic code, and

wherein each among the code phases relates to a predetermined position within the corresponding periodic code.

18. (Original) The apparatus according to claim 15, wherein each among the plurality of received signals is based at least in part on a corresponding direct-sequence spread spectrum modulated signal.

19. (Original) The apparatus according to claim 15, wherein each among the plurality of received signals is based at least in part on a corresponding direct-sequence pseudonoise modulated signal.

20. (Original) The apparatus according to claim 15,

wherein the correlator is further configured to determine a code phase for each among the plurality of received signals at least in part by calculating a correlation, for each among the plurality of received signals, between a corresponding code sequence and the plurality of received signals,

wherein each among the plurality of received signals has a corresponding periodic code;

wherein each among the code phases relates to a corresponding predetermined position within the corresponding periodic code, and

wherein the corresponding code sequence relates at least in part to the corresponding periodic code.

21. (Previously Presented) An apparatus comprising:

a GPS receiver configured to receive a first and second signal and to receive a signal comprising a time difference between the code phase of the first received signal and the code phase of the second received signal; and

a correlator configured to determine a code phase of at least one of the first and second received signals with respect to a predetermined code and to correlate the other of the first and second received signals to the predetermined code based upon the time relationship between the first and second received signals.

22. (Canceled)

23. (Original) The apparatus according to claim 21, wherein the correlator is further configured to determine a code phase for the second received signal at least in part from the information.

24. (Previously Presented) A system comprising:

a reference receiver configured to receive GPS signals from a plurality of space vehicles and to transmit information; and

a field receiver configured to receive signals from a plurality of space vehicles and to receive the information,

wherein the reference receiver determines a reference code phase for each among at least a first one and a second one of the signals, and

wherein the information pertains at least to a time difference between the reference code phases for the first one and the second one of the signals, and

wherein the field receiver determines a field code phase for the first one of the signals, and

wherein the field receiver determines a field code phase for the second one of the signals at least in part from the information.

25. (Canceled)

EVIDENCE APPENDIX

None

RELATED PROCEEDINGS APPENDIX

None